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TRANSNATIONAL CORPORATIONS IN THE COTTON INDUSTRY IN SUDAN

This paper was prepared by a consultant to ECA. The views expressed herein are those of the Author and not necessarily represent the views of this organization.

Table of Contents

	Paragraph	Pages
CHAPTER: I		
INTRODUCTION	1-10	1-3
CHAPTER II:		
STRUCTURE OF WORLD COTTON TRADE	11-21	4-7
AND PROCESSING		
A. Developments in the world textile industry	13-14	4
B. The Multi-Fibre Arrangement (MFA)	15	5
C. Textile TNCs in the developed countries	16	5
D. Textile TNCs in the Third World	17 -21	6-7
CHAPTER III:		
TRANSNATIONAL CORPORATIONS IN THE PRODUCTION		
AND PROCESSING OF COTTON IN THE SUDAN	22-47	8-14
A. Production of cotton in the Sudan	22-32	8-11
1. Involvement of TNCs in cotton production	25-26	8- 9
2. Impact of MNFs on Sudan's cotton industry	27-32	9-11
B. Transnational corporations and the manufacture of		
of textiles in the Sudan	33-47	11-14
1. Gulf International	36-42	11-13
2. Other TNC involvement	43-47	13-14
CHAPTER IV:		
GAINS TO SUDAN FROM ITS TEXTILE INDUSTRY	48-83	15-25
A. Estimates of retained value	49-69	15-22
1. Cotton for exportation; the Gezira case	49-57	15-18
2. Yarn for exportation; the Juneira case	58-62	18-19
3. Fabrics for local consumption: the STIC case	63-69	20-22
B. Internal rate of return (IRR) estimates	70-83	22-25

	Paragraph	Page
CHAPTER V:		
BARGAINING POSITIONS	84-96	26-28
A. General	85-89	26-27
B. The Sudan	90-96	27-28
CHAPTER VI:		
CONCLUSIONS	97-106	29-31

Appendix I: Sources

Appendix II; Statistical Tables

List of Tables

Table 1 Raw Cotton exports: retained value

Table 2 Distribution of gains between a spinning TNC (Jumeira Textile Mills) and the Sudan

Table 3 STIC: Retained value estimates

Table 4 Share of STIC and Jumeira of infrastructural services provided by the State for the industry

Table 5 IRR on government investments related to STIC and Jumeira

Annex Tables

Table I Basic cotton statistics - world, Africa and Sudan

Table II World mill consumption of fibres

Table III World production of textiles and clothing by areas

Table IV Industrial countries - imports of textiles and clothing

Table V Production of cotton yarn by area

Table VI Labour costs per hour

Table VII Largest textile firms

Table VIII Top producers of artificial fibres

Table IX Sudan cotton statistics

Table X Shares of biggest exportes of Sudan's cotton

CHAPTER I

INTRODUCTION

1. African countries feature among the top five producers of many important products: these include agricultural commodities such as cocoa beans (Ghana, Nigeria, the Ivory Coast), coffee (the Ivory Coast, Angola), palm oil (Nigeria, Zaire, the Ivory Coast), groundnuts (Senegal, Nigeria) and tea (Kenya); and minerals such as phosphate rock (Morocco, Tunisia), copper (Zambia) and manganese (Gabon). African producers of these commodities enjoy considerable influence over their markets, especially where the share of the top five producing countries in total world production is high, as indices of concentration indicate in the case of phosphate rock, palm oil, cocoa beans, tea and manganese ore(all above 75 per cent). Being small consumers of these products the share of African countries in world trade in the above-mentioned crops and minerals is considerably greater than their share of the world production of these same commodities.1/

2. The contribution of Africa to world production of cotton and its trade, however, is less significant. Although there are more than 30 cotton producing countries in Africa, the continent's shares of world cotton production and exports in 1979/80 were 8.2 per cent and 16.0 per cent, respectively. With a concentration ratio of 72 per cent, cotton does not rank among the commodities with highly concentrated production. Still, its market is dominated by the United States, the Soviet Union, the People's Republic of China, India and Pakistan - in this order. Egypt and the Sudan, Africa's two largest producers, rank seventh and eleventh, respectively; among cotton exporters they occupy the fifth and sixth positions, respectively. Despite this, their combined share of world exports was no more than 7.1 per cent in 1979/80.

3. Although African countries are insignificant producers and exporters of raw cotton, the commodity is an important contributor to both their GDP and export earnings. It is the main cash crop and export item in Chad, Sudan, Egypt and Mozambique and the second in the Central African Republic, Upper Volta and Uganda. As many as 9 million acres or 5 per cent of arabic land are under cotton, and cultivation of the crop occupies some 2 million persons, or slightly under 2 per cent of the continent's total labour force. During the last two decades cotton has acquired added importance in Africa's economy as the basis of a fast-growing textile industry, one of the continent's emerging breed of agro-industries. Textile manufacturing is now the leading industrial activity in Egypt, Ethiopia, Sudan, Nigeria, Tanzania and Togo; it ranks second in Ghana, Burundi, Madgascar and Mozambique. In these countries it accounts for 11 to 37 per cent of the manufacturing value added (MVA). As early as 1970, Africa's import-substituting and/or export-promoting textile firms had been responsible for some 21 percent of wages and 25 per cent of employment in all its industries.

1/ All references to sources and figures quoted in the study are listed in Appendices I and II.

4. For a number of decades, transnational corporations (TNCs) have been closely involved in cotton growing, processing and marketing in practically all African producing countries: in the Sudan, the establishment of large-scale cotton production, the management of plantations, the ginning of raw cotton and its export-marketing were all performed by foreign firms. TNCs played a great part in establishing Africa's textile industry. Some of them conducted required preliminary and feasibility studies and/or provided finance. Others supplied the technology, machinery and expertise needed for installing, operating and maintaining the plants. Licenses were obtained by many African textile firms from well-known manufacturers in the industrialised world for the use of their trade-marks and brand-names. Other TNCs were hired to manage African industries, and some undertook to market the produced yarn and fabrics abroad. In many cases, TNCs actually owned and operated textile factories in Africa. Others, which were not at all involved in the production, processing or marketing of cotton in Africa had, nonetheless, considerable impact on the continent's cotton industry: these were firms that manufactured products - mostly man-made fibres (MMFs) and fabrics - that competed with African raw cotton and textiles. Their attempts to displace cotton with MMFs in making textiles, to discourage the shift of manufacturing activity to the developing countries, to curb imports of textiles from those countries and inflitrate the markets and textile industries of the Third World have all influenced African countries engaged in producing cotton and cotton textiles immensely.

5. With some transnational corporations engaged in promoting cotton textile manufacturing in Africa and others seeking to stifle the growth of this industry, the activities of TNCs in cotton production, processing and marketing are more complex than their involvement in other major African export commodities like coffee, cocoa, copper or bauxite. This distinction is particularly important since cotton is one of the few important raw materials exported by Africa that is processed to any significant extent inside the continent. This unique position is attributable to many factors: the technology used in the textile industry is relatively simple, and its capital requirements are not huge. It is in fact a labour-intensive industry and, as such, it is naturally attracted to areas with an abundant supply to cheap labour -- one characteristic of Africa which has the added advantages of being a source of the basic raw material and one of the fastest growing markets for the industry's products. The efforts of TNCs either to take advantage of these factor or to resist them make the study of the role of transnational corporations in Africa's cotton industry as illustrated by the Sudanese case an excercise of special interest to students of the impact of TNCs on economic development in this continent and in the Third World in general.

6. The present study of the Sudanese cotton industry first briefly explains the position of Africa as a whole and the Sudan in particular as producers of cotton and its products. Special attention is given to the process used by the Sudan Government to displace TNCs managing the Gezira Scheme, the country's major cotton plantation, in 1950 and those engaged in the exportation of the fibre in 1970. Efforts to establish a fully-integrated cotton textile industry since the late 1950s are also examined in some detail.

7. The discussion then concentrated on the structure of local and international markets for cotton, competitive MMFs, cotton and synthetic textiles and clothing.

The position of TNCs in these markets is analyzed with emphasis on the phenomenon of increasing concentration in market power at the international level and its decreasing concentration in the local market.

8. The emergence of TNC influence in the Sudan economy in general and in the cotton trade and industry in particular is then analysed and includes profiles of leading TNCs operating in this field on the basis of published and unpublished data obtained from government sources and the TNCs themselves.

9. A substantial part of the study is devoted to examination of the country's investment laws which govern TNC operations in the Sudan and of agreements concluded between Sudanese textile firms and associate TNCs or among the TNCs alone. The resulting distribution of financial and other gains, direct or indirect, is weighed, using such tools of analysis as the retained value added (RVA) and the internal rate of return (IRR).

10. A final chapter summarises the findings of the study and offers suggestions to improve the host country's bargaining position vis-a-vis the textile TNCs and to enhance the RVA and other benefits according to the Sudan.

CHAPTER II

STRUCTURE OF WORLD COTTON TRADE AND INDUSTRY

11. Cotton yarn production in Africa has risen steadily from 220,000 tons in 1972 to 300,000 tons in 1979. Exports of cotton yarn which fell from 46,500 tons in 1972 to 34,400 tons to 1975, later increased to 49,055 tons in 1979. The production of cotton fabrics experienced sustained growth from 185,079 tons in 1972 to 221,629 tons in 1979. Africa's expanding textile industry now consumes 51 per cent of its cotton production. Exports of cotton fabrics from Africa declined from 25 thousand in 1972 to 20 thousand tons in 1974 but increased to 30,500 tons in 1979.

12. Neither Africa's production of fabrics nor its consumption consists entirely of cotton products. Production of man-made fibre (MMF) fabrics in Morocco, Egypt and Ghana averaged 4,953 tons in the years 1976-79 of which an average of 1,135 tons was exported. Consumption of locally-produced MMF fabrics was supplemented by imports that averaged 5,644 tons of MMF and 13,307 tons of cotton fabrics.

A. Developments in the world textile industry

13. These developments were quite in line with sweeping changes in the world textile industry since the early 1960s. Soon after World War II, cellulosic MMFs (rayon) and non-cellulosic ones (nylon, polyester, acrylics, terrylene, etc.) began to make inroads into areas previously monopolised by cotton: in the period 1947-51 their share of the fibre market was 15 per cent; by the end of the last decade they had captured 47 per cent of the market. Since MMFs were largely developed and produced by Wester/transnational corporations (TNCs) like Du Pont, Hoechst, Bayer, ICI, Montedison and Monsante while roughly half the world exports of cotton came from developing countries, poorer producers were threatened by the shift to MMF fabrics. For many, the solution was to develop textile industries that fed largely on locally-grown cotton. A considerable amount of their output was designed to meet rapidly expanding consumption by their own citizens, and as a result, the share of textiles and clothing in the imports of the oil-importing developing countries fell from 7 per cent in 1963 to 6 per cent in 1973 and to 4 per cent in 1979. At the same time, these countries became exporters of such commodities, the share of which rose from 6 to 11 per cent of total exports during the period 1963-79. Their much lower labour costs were their main asset: studies have shown that in countries like Belgium, labour was about 30 times more expensive than in Pakistan or Egypt. Furthermore, industries using MMFs have since 1973 lost the advantage they had enjoyed over cotton-based industries as a result of rising prices of petroleum and natural gas, their chief raw materials.

14. These developments cost the textile industries of the developed countries dearly in terms of capacity and employment reductions. Between 1969 and 1976 the spinning capacity in the EEC dropped by 47 per cent and weaving capacity by 5 per cent. During the same period Asian spinning capacity rose by 50 per cent and weaving capacity by 5 per cent. African weaving capacity rose by 152 per cent. The 1970s witnessed the loss of about one million jobs in the EEC textile industry,

and an additional two million jobs are threatened with disappearance by 1985. The United States experienced similar difficulties, but not on the same scale: about one-third of its 5,000 textile firms are operating at a loss, and by 1990 at least 30 per cent of them are expected to go out of business. The U.S. industry, however, has several advantages: its vast and well-protected home market absorbs most of the output; the U.S. accounts for 29 per cent of world production of textiles, but only 9 per cent of all exports. Also the American industry has the highest average textile productivity in the world for both spirning and weaving: West German, French and British levels are, respectively, 73, 57, and below 50 per cent of the American productivity average. Aggressive export drives have also enabled American products to capture new markets throughout the world. However, some of the advantages enjoyed by U.S. firms were temporary, namely suppressed oil prices and a weak dollar. Oil price decontrols and higher exchange rates for the dollar have since reduced the competitiveness of American textiles.

B. The Multi-Fibre Arrangement (MFA)

15. Resistance to the onslaught by Third World producers on the textile industries of the industrialised world is led by the major TNCs which dominate the business in America, Europe and Japan. TNC efforts to counter the challenge from the Third World materialised in the adoption of the MFA which discriminates against exports from the latter. Without the MFA, imports from developing countries would have grown much faster than USA exports, which though cheaper than EEC products, could not compete on a cost basis with those of the developing countries. Indeed, without the artificial advantages which the MFA gives USA products, exports of textiles and clothing from the developing countries may well force exports from the USA to shrink. What the developing countries find most objectionable in the Arrangement is that it deprives them of the benefits of a manufacturing acrivity in which they enjoy a genuine comparative advantage. The protections policies of the developed countries are in this area in direct contradiction with their highly publicised advocacy of free trade. Developing nations see the MFA as a violation of the principles of free and fair trade; they also deplore its continuous disregard by the developed countries, which use the trade-disruption clause to impose lasting barriers to imports from the Third World through bilateral agreements which are not regularly reported to the TSB.

C. Textile TNCs in the developed countries

16. Protectionism helps the largest textile TNCs to strengthen their position within their own territories. In the USA, the closing of multitudes of outmodel plants and the introduction of the most up-to-date equipment made in West Germany and Switzerland increased the share of the top 15 firms in total output from 15 to 40 per cent. In Europe, the course taken by the large TNCs was one of merger and cartelisation rather than rationalisation. British Cortauld waged a price war against some of its rivals in the Continent until they disappeared or were sold to the conquering firm. Another British company, Tootal, had to join hands with West Point Pepperel, a TNC in the USA. In France several mergers produced three dominant groups - Agache-Willot, Dolfu, Mieg, and Lainiar de Roubaix. In 1977 some leading textile TNCs in the EEC, including Akzo, ICI, Cortaulds, Montefibre, SIR and Rhone-Poulence, a hempted to set up fibre carel. These firms agreed to cut production by 18 per cent, but their pact was banned by the anti-trust authorities in the EEC.

D. Textile TNCs in the Third World

17. While barricading themselves behind trade restrictions, the textile manufacturers of the developed countries were striving to increase their share of the fast-growing markers in developing countries. Some also sought to cash in on the tendency of developing countries to expand their textile producing capacity. American-based TNCs are leaders in this move: they were helped by trends in world fashion towards leisure wears. American export drives concentrate on casual apparels, the best known symbols of which are blue jeans. The manufacture of jeans and other typical American wears has spread to other countries, yet the best known and most popular brands are American, such as Levy Strauss, Blue Bell (Wrangler) and Lee. Furthermore US-made denim and corduroy, the main jean apparel fabrics, are highly prized throughout the world: in Europe they command premiums of 5 to 10 cents a yard over local makes. Currently, half the exports of yarn, fabrics and carpets from the USA (valued at US$3.2 billion in 1979) goes to Europe and Canada. Some 30 per cent goes to Asia, Africa and Latin America for local consumption; the remaining 20 per cent is also shipped to low-wage countries such as Mexico and Hong Kong for manufacture into apparels that are re-exported to high-wage countries, including the USA.

18. The textile firms of developing countries were quite prepared to go along with this strategy. For instance, Columbian textile firms secured from American companies licenses to use their brand names and trademarks (usually for use in the domestic market only) in return for royalty payments ranging from 2 to 15 per cent of sales. The licensing firms extended technical assistance to the licenses, helping by conducting time and motion studies, suggesting new techniques for cutting and sewing fabrics and introducing new improved materials. The licensing companies also supplied the licensees with fashion information relevant to their busineess lines.

19. A number of textile TNCs appeared in the developing countries including Haci Omer Sabanci Holding of Turkey, Hyosung Group and Sunkyong of South Korea and Industrias Reunidas F. Matrazzo of Brazil. The 1979 sales of these four corporations varied between US 722 million and US 2,629 million. Smaller TNCs are quite numerous: they operated primarily from Hong Kong, the Republic of China and South Korea. Some have linked up with TNCs from developed countries so as to expand their business in the Third World. For instance, a Japanese TNC bought a major interest in a Hong Kong textile firm, and together they established integrated plants throughout Southeast Asia: The Hong Kong firm supplied spinning, weaving and garment-making skills, while the Japanese firm provided synthetic fibres and technical know-how.

20. In Africa textile TNCs from both the developed countries and developing Asiatic regions have set up affiliate plants. For instance, an American firm, Riegel, established textile mills in the Ivory Coast and Niger. Some Hong Kong firms set up store in Ghana and Nigeria. At Kaduna in Nigeria a textile plant has existed since 1965 as a joint British, Japanese and Kuwaiti venture. Unlike their Asiatic counterparts, African textile firms cater mainly for the domestic market. Only Egypt, Morocco, the Ivory Coast, Madagascar and Zimbabwe export fabrics.

21. The link-up between textile interests in the developed countries and the Third World suits both sides well. Third World firms obtain both finance and know-how from their counterparts in the industrialised countries. TNCs in the latter find in this link-up an effective means of penetrating the usually heavily-protected markets of the developing countries. This is particularly important to the TNCs that produce MMFs and wish to encourage the consumption of synthetic fibres and fabrics in cotton-producing developing countries. In addition, this arrangement enables the textile TNCs in the developed countries to take advantage of the low costs of production in the developing countries in securing cheap supplies of yarn or finished fabrics or clothing for marketing in the high-wage countries.

CHAPTER III

TRANSNATIONAL CORPORATIONS IN THE PRODUCTION AND PROCESSING OF COTTON IN THE SUDAN

A. Production of cotton in the Sudan

22. The economy of the Sudan is heavily dependent on cotton. As much as half a million hectars or some 10 per cent of land under cultivation are devoted to the crop; half a million farmers are engaged in its cultivation and twice as many people harvest, gin, store and, at port Sudan, handle it. It accounts for 48 per cent of the aggregate exports of the country. The textile industry, which is essentially cotton-based, consists of 22 state and private plants with assets valued at about $ 400 million and a labour force of about 32,000 persons. Cottonseed is also the basis of a sizeable processing industry that produces edible oil, soap and animal feed.

23. There has been, however, a noticeable deterioration in the performance of the Sudanese cotton industry. The decline in acreage during the 1970s was accompanied by a fall in the volume of the crop. Following an all-time peak in the mid-1970s, there has been similar drop in production of textiles in recent years. Nevertheless, the country is still committed to a 15-year plan to expand, during the period 1972-86, the country's spinning capacity from 100,000 to 1,000,000 spindles, and the number of looms from 3,700 to 12,500. The expanded industry is expected to process in four stages half the country's cotton output of about 200,000 tons. The first phase was intended to make the country self-sufficient by 1976 and finished garments. Phase II, which was to end in 1978, aimed at producing 70,000 tons of coarse, medium and fine yarn for exports. Phase III was expected by 1982 to weave 25 per cent of the yarn produced in Phase II into 126 million meters of grey fabrics for exportation. The fourth phase (1983-86) will witness the exportation of dyed and printed fabrics. The expectation is to market yarn in the industrialised countries and woven fabrics in neighbouring countries of Africa and in Asia.

24. Unfortunately, the expansion in yarn and fabric production has not proceeded according to plan. The 1970s ended without the Sudan attaining self-sufficiency. In fact, imports of cotton and synthetic yarn and fabrics exceeded 20 thousand tons throughout the seventies. However, in recent years some Sudanese firms have begun exporting yarn to a number of industrialised countries.

1. Involvement of TNCs in cotton production

25. As an exporter of cotton and yarn and an importer of cotton and synthetic yarn and fabrics as well as textile machinery and technology, the Sudan has been dealing with many transnational corporations both directly and indirectly. In fact, it was an American TNC that began modernisation of cotton production in the country. In 1904, a millionnaire from Indiana with investments extending from the United States to Korea established the Sudan Experiental Plantations Syndicate to experiment with the production of pump-irrigated long staple cotton at Zeidab in the Norther Province

of Sudan. In 1910, the company passed into British hands and was renamed the Sudan Plantations Syndicate (SPS). It was destined to manage the million-acre Gezira Scheme which became the backbone of the Sudan economy for more than half a century. The Syndicate was nationalised in 1950 and replaced by the Sudan Gezira Board.

26. For two decades the Board marketed the entire Sudanese crop through 18 (at one time - 1959 - the number rose to 38) export houses, most of which were foreign-based with branches in other countries. They included Ralli Bros. (British), Société Cotton (French), Reinhart (Swiss) and Forghalli (Egyptian). Most of the export houses operated as commission agents to both large and small firms in the industrialised countries. Nationalisation of the cotton export trade in 1970 changed matters very little: the Sudan merely began to deal with the foreign offices of these firms, and not with the spinners as Egypt did. Consequently, it is not possible to find out which TNCs process Sudanese cottons, what proportion of the country's fibre enters their mills and what influence they exert on the markets for the fibre. The situation had many disadvantages from the Sudan's point of view. There is evidence that the export firms, five of which handled about 50 per cent of all cotton exports, were organised into a cartel which helped to depress the prices in the auctions run by the Gezira Board. They often engaged in speculative trading which had a destabilising effect on the market. Their tendency to sell on a type-basis, and not according to grades determined by the cotton classifiers, and their resistances to the Board's practice of stamping the grades on the bales gave some credence to charges that they were involved and, indeed, a primary beneficiary in the grade manipulation scandal that was one of the main causes for nationalisation of the cotton trade. Also, like TNCs operating in many countries, their main concern was to make a profit from marketing cotton irrespective of its source: they would therefore readily promote non-Sudanese cottons at the expense of Sudanese ones if this was in their own interest. Besides, those exporters were publicizing their own types of cotton and had no incentive to advertise the special qualities of Sudanese growths. In fact, spinners often complained that they received from the traders very little technical information, yet this information, such as results of micronaire, fibrograph and Pressley tests, was readily available in producing countries.

2. Impact of MMFs on Sudan's Cotton Industry

27. The TNCs that had the greatest impact on the marketing of Sudan's cotton were no doubt those that developed and produced man-made fibres. As one of the major producers of extra-long staples (ELS), the finest cottons for which competition from the MMFs was at its sharpest, the Sudan was among the cotton-producing countries most seriously affected by the activities of chemical TNCs engaged in MMF production. Technically, the MMFs had many advantages over cotton: as their attributes are fairly controllable and they are more adaptable than natural fibres to the needs of spinners. In particular, they can be imbued, as required, with such properties as strength, resistance to heat, and colour or colourlessness. Also, MMFs are decidely more regular in all qualities than cellulosic fibres. Favourable input-output ratios render the costs of spinning MMFs much lower than those of spinning cotton, which yield much waste when spun. Fabrics made out of MMFs are strong, moth-resisting, need no ironing, and do not crease. Heavy spending on research and promotion by the TNCs helped to win over spinners, weavers and consumers to MMFs. They were assisted in this endeavour by the low prices of petroleum, the chief input in MMFs, charged by

OPEC until 1973. After that, American chemical TNCs benefitted from oil price controls and the weakness of the dollar for most of the 1970s.

28. Of course, cotton had qualities which MMFs lack; moisture-absorption is the main one. It is in addition soft and seldom causes allergies. However, these properties can be retained when cotton is blended with such MMFs as rayon, nylon, polyester of acrylic. But ELS cottons, which constitute the bulk of fibre exported by the Sudan, do not blend well with synthetics; cost considerations make spinners prefer shorter and cheaper cottons for blending with MMFs.

29. The sharp rise in petroleum and gas prices since 1973 has not stopped MMFs from continuing to increase their share of mill consumption of all fibres, but has considerably curtailed their rate of expansion. During the period 1970-1973 the consumption of non-cellulosic fibres increased on average by one million tons annually, and their share of total mill consumption rose from 21.7 to 29.4 per cent. During the period 1974-79 the rate of expansion dropped to 0.6 million tons a year, and the share of these fibres rose merely to 36.0 per cent. In 1980 there was a drop for the first time in the volume of MMF (synthetics) consumption from 10,614 thousand to 10,470 thousand tons. In that year the MMF-TNCs in Western Europe alone incurred losses totalling one billion dollars.

30. TNCs engaged in the production of MMFs were very slow to respond to the sharp rise in their production costs at a time when a global recession was setting in. In fact, some of them, like Du Pont and Monsanto of the United States, continued to expand their production capacity in spite of rising costs and falling demand. Both suffered from severly reduced earnings, with Monsanto faring worse than Du Pont, which is the largest producer of synthetic fibres in the USA, owing some 40 per cent of the country's capacity. Eventually, Du Pont had to reduce its reliance on fibres and moved into the field of molecular genetics. It is seeking to develop new drugs, herbicides and pesticides, and hopes to reduce the share of fibres in its total sales from 50 to 44 per cent during the 1980s. Its production capacity will increasingly be diverted to the manufacture of speciality fibres such as kelvar, a fibre of high strength that can be used for bulletproof vests and belted tyres. Du Pont also tried successfully to mitigate the effects of rising input cost (petro-fees account for 75 per cent of fibre costs) by introducing measures to raise productivity.

31. American, European and Japanese TNCs are locked in a stiff struggle for the shrinking MMF market, with American and Japanese firms in the lead until now. As manufacturers of MMFs, however, all these TNCs are untied in campaigning against cellulosic fibres such as cotton. Helped by favourable market conditions, particularly price trends, cotton producers are fighting back. Strenuous efforts are now made in the field of research and promotion by the International Cotton Institute, an offshoot of the International Cotton Advisory Committee, and by major cotton processors. Their aim is to develop better cottons, improve their preparation, reduce production and handling costs and win new markets. In recent years, a Japanese firm is said to have developed an easy-care all-cotton fabric suitable for use as shirts, blouses or sportswear. There were also significant improvements in the manufacture of cotton fabrics with good stretch, strength and heat resistance properties.

32. These recent developments in the manufacure of MMFs and in the production of cotton fabrics are of particular interest to the Sudan, first and foremost because they affect ELS cottons, which constitute the bulk of cotton exports from the country. The MMF-TNCs are increasingly concentrating their efforts on the fine end of the textile market, which is the traditional territory of ELS cotton, by blending MMFs with shorter cottons so as to dislodge the ELS growths. Improvements in the use of cotton for making durable-press apparels and warp knittings are largely ELS-based. Thus the struggle between cotton and the countries that produce it and MMFs and TNCs making them manifests itself at the weaving stage.

B. Transnational corporations and the manufacture of textiles in the Sudan

33. The Sudanese textile industry produces yarn from its own use and for exportation. Sudanese weavers supplement their purchases of locally-produced cotton yarn with imports of both cotton and artificial counts. On the market, their products face stiff competition from imported cotton, MMF or blended fabrics. In all aspects of the trade in textiles, Sudanese manufacturers are affected by the activities of foreign-based textile TNCs. TNCs that produce yarn from MMFs are naturally bent on restricting exports of cotton yarn from and at the same time seeking to expand their sales of synthetic yarn to the Sudan. TNCs engaged in the production of fabrics and apparels made of MMFs or cotton blended with MMFs are doing the same. These TNCs played a leading role in erecting barriers against exports of textiles from the developing to the industrialised countries, and, of course, the Sudan was one of the developing countries affected. The textile TNCs are also increasing their involvement in the textile industries of developing countries, as the Sudanese experience clearly shows.

34. The Sudan's ambitious 15-year Plan to become self sufficient in cotton fabrics and then turn into an exporter of yarn and fabrics render its case of particular interest to students of the attitudes of the textile TNCs towards their rivals in the Third World. However, it must be clearly stated that neither the progress of the Sudanese textile industry nor the involvement of TNCs in it are typical of occurrences in Africa.

35. The history of modern spinning and weaving in the Sudan begins in 1958 with the registration of the Sudanese-American Textile Factory as a private company with an authorised capital of LS.1.5 million. The paid-up capital was LS 0.9 million, subscribed by an American of Greek origin. The factory cost LS 18.17 million, including LS. 5.73 million paid for the machinery, which was imported from Britain on credit. Local commercial banks provided the rest of the long-term finance, as well as much of the short-term one. Cotton was bought from the government on credit. The factory, with its 55,000 spindles and 1,680 looms, commenced production in 1962, it had the capacity to turn 50,000 bales of cotton into 45 million yards of fabrics. The factory was beset with numerous problems that prevented it from reaching full capacity production and it failed to repay loans to the machinery suppliers, the commercial banks and the government. USAID came to its aid with a US$10 million loan but the company continued to falter.

1. Gulf International

36. In 1968, the Sudanese American Textile Factory was taken over by the Kuwaiti TNC Gulf International, which paid LS 10 million for the purchase. Gulf, a private

company dominated by a member of the Kuwaiti royal family, has world-wide interests including fishing in Kuwaiti and Somali waters, match-making in Nigeria and Zaire, wood cutting and processing in Canada, dairy production in Holland, spinning and weaving in Lebanon and other activities in the United Kingdom, Japan and India. In 1974 it bought equity into Lonrho, a TNC with wide interests in the developing world. This London-based TNC had a very controversial record and has faced many crises since 1973; Kuwaiti participation helped to bolster its position. The two became partners in the Sudanese Kenana sugar scheme, which Lonrho had helped to launch and steer. When the costs of the scheme quintupled in five years, the Kuwaitis helped to oust Lonrho and resigned their seats on the Lonhro Board of Directors, retaining, however their 29 per cent equity share in the company.

37. As the main Arab investors in the Sudan, Kuwaitis enjoy tremendous goodwill and are not viewed with the suspicion that characterises Sudanese perception of both foreign transnational operators. Their interest range from road transportation to poultry production, the construction of office buildings and hotels. The Gulf International group of Companies (Sudan), however, remains their chief possession in the country. The fact that a Sudanese is among the prominent shareholders in gulf has also added to its local prestige.

38. Gulf has a number of subsidiaries in the Sudan, most of which were bought as on-going but losing concerns. These include two match factories, a glass factory, a particleboard mill, a chemical company, a packaging firm, a publicity agency and an air-taxi service. The giant textile mill, renamed the Sudan Textile Industry, however, remains its main subsidiary in the Sudan. The factory's productive capacity was increased by 50,000 spindles and 1,200 looms so as to add 30 million yards of finished fabrics to production. The number of employees rose from 4,300 to 8,500.

39. The Sudan Textile Industry Company (STIC) had troubled relations with both the authorities and its own employees. Matters came to head between all three parties in April 1981 when the workers seized members of the board of directors, locked them in a basement room and barricaded themselves in the factory. They were demanding payment of £S 171,000 in arrears in lieu of overtime work, leave money, medical costs, etc. The Company, which had been facing serious financial problems, claimed to have incurred losses totalling £S 27 million in the last five years. Its indebtedness to banks and to the state-owned cotton-growing corporations ran into tens of millions of pounds. When the troubles flared up in the spring of 1981, STIC had already exhausted its credit ceiling of £S 15 million and was pressing the government for further credit amounting to £S 12 million.

40. Lack of short-term finance was only one of the problems of the firm. Its products could not compete with fabrics imported from such countries as Egypt, Pakistan, India, Korea and Romania, in spite of the generous subsidies it received and the high duties imposed on imported fabrics. STIC paid its workers quite generous wages by Sudanese standards, but quite low comparison to those paid by textile mills in other developing countries. With an average hourly wage of £S. 0.20 (US$0.40) earned slightly more than their counterparts in Egypt (36 cents) but less than in South Korea, Brazil and Tunisia (45-85 cents).

41. STIC also suffered from problems facing most Sudanese factories. These include recurrent power cuts, a high rate of labour turnover and absenteeism as well as acute

hard currency scarcities leading to shortages in spare parts and chemicals. Power cuts caused production losses that varied between 9.2 and 14.2 work/days during the period 1975-79. In 1980 there was a sharp rise in lost hours, which added to more than 60 work days. Continuous emigration of workers caused the labour turnover rate to rise from 16.3 per cent in 1974 to 28.2 per cent in 1980. The devaluation of the Sudanese pound raised the costs of imported spares and chemicals by 25 per cent to LS 1.3 million in 1980. STIC also complained that its spindles were designed to handle short, medium and long-staple cottons in descending proportions; after 1970/71 the government supplied it with cotton in proportions that reversed this order. This factor and stickiness in recent cotton crops led to considerable under-utilisation of productive capacity. Increases in electricity rates, cotton and petrochemical prices, production taxes and the minimum wage level raised production costs during 1980 by LS 5 million, or 33.4 per cent.

42. As a result, of all these problems, the output of both the spinning and weaving sections of the factory has declined considerably in recent years. In 1973 STIC produced 9,462 tons of yarn and 83,856,000 yards of finished fabrics. During the years 1976-1980, production averaged 4,594 tons of yarn (30 per cent of capacity) and 31,826,700 yards of fabrics. Significantly, the factory, ceased in 1977 to use imported yarn, which resulted in 1973 in production of only 15.3 million yards of fabrics.

2. Other TNC involvement

43. The Sudan Textile Industry differs from most of the textile mills in the country in that it is predominantly owned by non-Sudanese, and that it is completely dominated by an Arab TNC, Gulf International. In most of the remaining textile companies there is involvement of either European or Asiatic TNCs. Some of these TNCs supply machinery, usually on credit, and hold shares in the client textile company. This is the case with the Japanese firm Gosho-Kematsu, which supplied the Khartoum Spinning and Weaving Company (KSWC) (Regd. 1959) with machinery worth LS 1 million. Payment was made in instalments extending from 1960 to 1966, later prolonged to 1968. The factory had 20 thousand spindles and 714 looms that could produce 3,230 tons of yarn and 30 million yards of fabrics. The Japanese TNC purchased 8½ per cent of KSWC shares. Its experts supervised installation of the machines and, later, their use in producing yarn and fabrics.

44. A similar arrangement was negotiated in 1970 between the New Halfa Union of Cooperative Societies (NHUCS) and Mach-Im-Tes, a private Italian company which represented several Italian manufacturers of textile machinery. This firm performed 'turn-key-jobs' in such countries as the Republic of China, Yugoslavia and Algeria. It undertook to supply the NHUCS with machinery worth US$ 20.5 million on credit. It also agreed to take up 10 per cent of shares, operate the factory during its experimental stage and market abroad the yarn it produced. To-date this agreement has not been carried out.

45. Maurer Textile Company, a Swiss firm, is a shareholder in the Gezira and Managil Textile Company (GEMATEX), which is 62.5 per cent owned by the Gezira and Managil Tenants Cooperative Corporation (GMTCC). The machinery for the US$ 33 million plant was bought from France, Holland and Belgium, and Maurer Textile Co., which held 9.5 per cent of shares, acted as consultants. The factory operates with 14,500 spindles and 342 looms and produces 12 million meters of fabrics. It employs some 900 persons, many of whom have been trained in factories owned by the Swiss TNC in Europe and Africa.

46. The largest textile TNC to become involved in the Sudanese textile industry is the British firm Tootal, which ranks among the 500 largest firms outside the USA and the top 20 textile firms. Tootal made sales worth US$ 773 million, owned assets worth US$ 559 million and employed 29 thousand persons in 1979. It undertook to oversee the installation of the British-made machinery supplied by an associate firm, Platt Sacolowel Co., and to train the employees of the spinning factory owned by Jumeira Textile Mills (Sudan). Tootal also contracted to act as production managers for three years. The owners of the factory are a wealthy family of Dubai and a Dubai-domiciled Sudanese associate, who have other interests in the Arab world. The factory's 39,600 spindles produce 1,500 tons of double-combed and Uster-tested yarn for exportation. The Company employed a Swiss firm Combaro, to market its products in Switzerland. Combaro has experience in marketing Peruvian yarn in Europe.

47. A Pakistani textile firm Bibojee, is closely associated with another Sudanese textile Company which erected the Dageir factory. The US$ 38 million factory spins, weaves, dyes and prints up to 12 million meters of fabrics. Bibojee Services Ltd. contributed part of the credit of US$ 23 million obtained by the company from the International Finance Corporation (IFC), the Sudan Development Corporation (SDC), the German Development Company and two Paris-based banks. It also purchased shares in the textile firm and after supervising the erection of the factory, is employing 37 Pakistanis to operate it.

CHAPTER IV

GAINS TO SUDAN FROM ITS TEXTILE INDUSTRY

48. This section attempts to quantify the socio-economic impact of TNCs on the cotton trade and industry of the Sudan; it first calculates the retained portion of the value of raw cotton produced for exportation under the auspices of a British TNC, the Sudan Plantations Syndicate; yarn produced for exportation by Arab TNCs; and fabrics manufactured by the Arab TNC, the Sudanese Textile Factory, for domestic consumption. Later, an attempt is made to compute the internal rate of return of projects implemented by some of these TNCs.

A. Estimates of retained value

1. Cotton for exportation: the Gezira case

49. Attention first focuses on the Gezira Scheme during its 25 years of management by the Sudan Plantations Syndicate (SPS) which played a leading role in launching the million-acre irrigated scheme in 1925. SPS, aided by the British Cotton Growers' Association (BCGA), helped the Sudan Government to obtain the guarantee of the British Government for a loan of £13 million used in financing the construction of a dam and the canalisation system for the scheme. The loan was mainly in the form of 5½ per cent Bond (1929-59). The syndicate also provided the capital invested in vital administrative and marketing installations and, for this reason, was awarded contracts for management of the scheme and marketing of the cotton in retrun for 20 per cent of the net proceeds of the crop. The Government, which became responsible for providing land and irrigation water, received 40 per cent. The remaining 40 per cent was the share of the tenant farmers who performed all farming and harvesting operations under the Syndicate's supervision. The net revenue figure was obtained by deducting expenses incurred jointly by the three partners: these included the costs of ploughing, seeds, pest control, cotton picking, stalk pulling, ginning, baling, storage, transportation, marketing, insurance and chemicals. Most of the expenses included in the Joint Account as well as many of those incurred separately by the three partners are met by payments to foreign agents, so that a considerable part of the export value of the fibre remained overseas. Outflows of payments comprised the bulk of the Syndicate's share, the costs of loan amortization and interest thereon, shipping, insurance, marketing and payments for inputs such as pesticides, fertilizers, fuel, sacking and machinery. The compensation paid to the Syndicate upon nationalisation in 1950 must also be considered. However, before making necessary calculations, examination is required of the claim that during the period 1925-50, Sudanese cotton was sold to Britain at prices that did not reflect its true value. Any resulting underpricing must be seen as an outflow affecting the retained part of the fibre's real value.

50. During most of this period the Syndicate consigned the Gezira crop to Liverpool where it was disposed of by the BCGA for a 1 per cent commission. From the outbreak of the Second World War, the crop was sold in bulk to Britain at prices negotiated between the Sudan Government and the Cotton Control Board (CCB) and later, the Raw Cotton Commission (RCC). A study of the terms of the Bulk-Sale Agreements of 1940 to 1952 shows that Sudanese growths were sold at prices which were considerably

below comparable Egyptian varieties' and even below those of inferior American growths. In 1938 and 1939, Egyptian cotton had an average price of 6.5 pence per pound; (d/16) Sudan cotton's was 6.2 d/lb; the United State's fibre's was 5.2 d/lb. But during the period 1940-1947, their average were 15.8 d, 10.3 d and 12.9 d, respectively. This means that during the war, Sudanese growths were under-priced by 32 per cent compared to Egyptian cottons and by 33 per cent relative to American cotton. Since the Gezira crop fetched approximately £40 million during the period, the underpricing must have cost the country roughly £20 million. During the years 1948, 1949 and 1950, the Gezira crop was sold to the RCC at prices that were 48 per cent below those of comparable Egyptian growths. As sales during these years reached a total of £37 million, the Sudan must have lost about £34 million in three years. Assuming that Sudanese cotton was underpriced at about the same rate over the entire 25 years of SPS management during which sales totalled £98.5 million, Sudan's losses must have been in the order of £69 million.

(a) SPS Share

51. During the period 1925-50 the SPS received £20.4 million of the gross sales of £98.5 million; £39.9 million went to farmers and £38.2 to the Government. Of this figure, SPS netted £16 million, which enabled it to pay dividends averaging around 25 per cent. Most of its costs of £4.4 million were also in the form of remittances, payments to the British staff and repayment of credit used to finance the construction of offices, houses, ginneries, etc. On top of these remittances, the SPS collected and transferred in 1950 the sum of £4 million paid to it in lieu of the net assets that were nationalized upon the expiry of its concession.

(b) Debt Servicing

52. The Government had to repay out of its share the £13 million loan obtained from the British stock market and pay £21.5 million in interest charges. Since repayment had to take place between 1929 and 1959, the sum due during the period 1925-1950 cand to £9.1 million and £5.1 million, respectively, or £24.2 million in total.

(c) ECGA's Commission

53. The ECGA operated as a marketing agent for the SPS during the period 1925-1939 for a 1 per cent commission. Thus, the Association earned about £210,000 in return for its services.

(d) Imported Inputs

54. Payments for agricultural inputs such as chemicals, fuels and machinery averaged about 12 per cent of gross receipts during the period, or around £11.8 million.

(e) Wages of Foreign Pickers

55. About 24 per cent of the share of a tenant goes to hired picking labour, or about £9.6 million for the whole period. Since about 40 per cent of the pickers were non-Sudanese (Nigerians, Chadians, etc.), repatriations out of this sum must have been in the order of £3.8 million.

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The overall picture is presented in the following table

Table 1

	(£m)	%	(£m)	%
Real value			167.5	100
Losses through underpricing			69.0	41
Actual Receipts	98.5	100		
Outflows:				
SPS:				
Share	20.4	21		
Compensation	4.0	4		
Debt Servicing:				
Loan	9.1	9		
Interest	15.1	15		
Inputs	11.8	12		
BCGA Commission	.2	-		
Foreign Pickers	3.8	4		
Total	64.4	65	54.4	38
Retained value	34.1	35	24.1	21

56. The above table shows that the Sudan actually retained no more than 21 per cent or roughly, a fifth of the real value of it cotton crop, and 35 per cent or about a third of what it actually received for the fibre.

57. Nationalisation of the Gezira Scheme paved the way for a drastic albeit gradual redistribution of gains. Sudanisation of the staff, amortisation of the £13 million loan and termination of the Bulk-Sale Agreement were not completed until late in the 1950's. At the end, the remaining outflows were primarily payments for agricultural inputs and remittances by foreign cotton pickers.

2. Yarn for exportation. The Jumeira case.

58. Jumeira Textiles mills is a Dubai-owned firm which has only recently completed construction of a spinning factory with 39,600 spindles. The factory produces yarn for exportation. It uses 9,000 bales of cotton annually so as to produce 1,500 tons of double-combed and Uster-tested yarn (average count number 40). Total project costs reached £S 12.8 million comprising £S 8.5 million for machinery, £S 3.2 million for building and structures, plus £S 1.1 million construction, management, training and marketing services provided by a British firm (Tootal) and a Swiss compnay (Combaro). The machinery was supplied on credit by Platt Scholovel of UK, repayment being spread over seven years after a 2 year grace period. The interest charged was fixed at 8 per cent. The firm employs 400 operators. It imported vehicles so as to transport all its inputs and products.

59. The factory uses medium staple cotton, a bale of which costs (FOB Port Sudan) ₤S143 at 1980 prices. It turns 9,900 bales valued at ₤S1,287,000 into 1,500 tons of yarn fetching, at ₤5,000 per ton, ₤S7.5 million. The distribution of the value added of about ₤6.2 million appears to be skewed in favour of the TNC that owns the factory, indicated in the table below.

60. Apart from cotton, the TNC purchases a few inputs from the Sudan. Electricity is prominent amongst them: The factory's 39,600 spindles consume 3,168 KW per hour and, at full capacity, operate in three shifts 24 hours a day, 350 days a year. At 54 millimes per KWH, the annual charges come to ₤S 1,437,000. As for labour, it costs ₤S 240,000, assuming an average pay of ₤S 600 for the Company's 400 operators.

61. The portion of value added remitted abroad is considerable. There is first the sum paid annually to the suppliers of machinery and prefabricated structures, which, together with interest charges, amount to about ₤S 1,656 thousand. At 10 per cent annual depreciation of machinery comes to ₤S 45,000 a year. The rest represents commissions and fees paid to Tootal and Combare as well as dividends issued to shareholders. No figures have been given for payments made to the two TNCs, but informed sources say that their aggregate commissions represent about 12 per cent of yarn sales of ₤S 900,000.

62. It is significant that the Jumeira Textile Mill pays no taxes and is self-sufficient in transportation. These facts help to reduce substantially the country's share of the total value added. The table below indicates how this sum is shared between the TNC and its associate companies on the one hand, and the host country on the other.

Table 2

Distribution of Gains between a Spinning TNC

(Jumeira Textile Mills and the Sudan)

Value of Exported Yarn: ₤S7,500,000

Raw Cotton	1,287	Debt Servicing	1,656
Wages	240	Spare Parts and Maintenance	885
Electricity	1,437	Commission & Fees	900
		Profits	1,095
Total	2,964		4,536
% of Yarn Value	39.5	% of Yarn Value	60.5

3. Fabrics for local consumption: the STIC case

63. The Sudan Textile Industry Company (STIC) was bought in 1964 from its American-Greek owner by the Kuwaiti TNC Gulf International for £S 10 million. At the time, the factory had 55,000 spindles and 1,600 looms capable of converting 50,000 bales of low grade E-3 and Ms cotton into 45 million yards of grey and bleached fabrics. The Kuwaiti firm spent some £S 7.6 million between 1971 and 1973 to add 22,000 spindles and 216 looms to the factory's capacity, which rose to about 75,000 bales. A new spinning and weaving factory was added to the existing one at a cost of £S 45 million. This new factory has 38,000 spindles and 1,100 looms. It started production in 1980.

64. In spite of continuous expansion in the firm's productive capacity, its output has been shrinking. It fell from a peak of 38.9 million yards of finished fabrics in 1973 to 30.1 million yards in 1980. Consequently, the TNC that owns the mills began in 1975 to experience heavy losses, as it had done before 1971. Liquidity problems, power cuts, hard currency shortages and high rates of labour turnover and absenteeism, with spurts of trade liberalisation which left the firm's products exposed to stiff foreign competition, made the Kuwaiti company lose £S 27 million during the second half of the 1970s. Protection against competing imports of cotton fabrics became particularly important after protests by farmers had forced the Government to adjust upwards the prices of the raw cotton sold to the local mills at a big discount.

65. The position of this firm is examined below at two different points in time, 1971 and 1980 to depict contrasting situations. The portions of income from sales of yarn retained in the Sudan and transferred abroad are given as an indication of the distribution of gains between the TNC and the host country. Comparisons are also made between the amounts of foreign exchange saved by substituting locally produced fabrics for imported ones and levels spent in the process of making the former.

Table 7

STIC: Retained Value Estimates

	1971 (£S. million)		1980 (£S. million)	
Ex-store Value of fabrics	5.729		6.293	
Retained value:				
Raw cotton	1.440		4.525	
Wages	1.502		4.250	
Power	0.447		1.442	
Interest on Working Capital	0.210		2.978	
Total	3.599	72.5%	13.195	92.1%

Table 3 (Cont'd)

Remitted value:				
Capital Depreciation	0.817		1.500	
Spare parts	0.245		0.592	
Raw Materials	0.300		0.700	
Total	1.362	27.5%	2.822	17.9%
Grand Total	4.961	100.0%	16.067	100%
Profit (+) or loss (-)	0.759		-0.174	
CIF Value of Imported Substitutes	4.160		5.410	
Remitted Part of Value	2.121		2.872	
Savings in Foreign Exchange	2.039		2.546	

66. The table shows that while production costs soard by 22 per cent receipts from sold fabrics rose by only 2 per cent between 1971 and 1980, causing the Kuwaiti firm to lose heavily in 1980 after making a fair profit in 1971. Fortunately, the greatest increase in costs affected items procured locally, indicating a marked rise in the part of total value retained in the country and an increase in foreign exchange savings despite a sharp fall in production.

67. The greatest increase concerned prices of cotton, which more than trebled in spite of an almost 50 per cent reduction in volume. Not only did the FOB price of the average bale rise from £S.50 to £S 181, but the discount given to STIC was also discontinued. There were also substaial, increase in both the number of employees (from 4,300 to 8,500) and average wages (from £S 349 to £S 500 per annum). Electricity utilization rose due to expanded productive capacity from 5,168 to 6,358 KWH, and its rates increased from 12/mm (millimes) to 54m/m per KWH, although working days dropped from 300 to 175. There was also an increase in interest on working capital from 7 to 12 per cent. In 1971 working capital stood at £S 3 million; but in 1980 STIC had to pay interest on £24.0 million which included vast arrears from previous seasons.

68. Capital depreciation is calculated at 10 per cent of book value. In 1971 the original sum of £S 8.17 million spent on fixed assets alone was being consumed; but in 1980 while those assets were still being written off, a further sum of £S 763 million, invested between 1971 and 1973 in expanding capacity, was also being used up at the rate of 10 per cent per annum thus the depreciation allowance namely, doubled Spare parts were calculated at 3 per cent of capital costs, but an allowance has to be made for the recent 25 per cent devaluation of the Sudanese currency. This factor also helped to inflate the costs of chemicals and other imported materials, whose CIF prices had risen anyway during the 1970s.

69. STIC's 1980 loss of more than £S 9 million may be seen as a subsidy paid by the Kuwaiti TNC Gulf International to the Sudan. After all, the Government paid STIC £S 1 million in 1971 in the form of a discount on cotton, which enabled the firm to make a profit of £ 759,000. However, it must also be mentioned that in 1980 the Sudanese consumer was paying 220 m/m per STIC yard instead of 180 m/m for an imported yard of comparable quality. Besides, with much of the £S24.3 million owed by STIC to the state-owned banks being viewed as bad debts, the Sudan may well be still subsidising Gulf International instead of receiving subsidies from it.

B. Internal rate of return (IRR) estimates

70. The internal rate of return (IRR) is an important albeit illusive concept. Data deficiency renders its computation almost impossible. But it is significant as an indicatror of the return on direct and indirect investments made by the host government in support of projects undertaken by TNCs; as such it is a useful guide to government planners in their negotiations with the TNCs. For this reason an attempt is made here to calculate the IRR for government investments in two textile plants set up by two different TNCs, STIC and the Jumeira Textile Mills. Since both mills are entirely foreign-owned, government investments connected with them are indirect: they are essentially infrastructural in nature, including expenditures for cotton cultivation, power generation, transportation, land allocation, credit extension and training. Likewise, state revenue from its investments in these fields do not include any form of dividend, since the government holds no shares in the companies which own the two mills. Its revenue comes in the form of fees, rates, taxes and interest.

71. The two factories are part of a textile industry consisting of twenty-two mills, ten of which are state-owned. One of them, STIC, is the largest spinning and weaving mill in the country. Jumeira is a medium size firm engaged in yarn production for exportation. Table 4 shows the relative importance of these two firms in the Sudanese textile industry. Knowledge of their share of state services to the industry is necessary to determine the level of host country investments in support of the activities of the two TNCs. While this can be calculated with some accuracy for such matters as cotton and energy consumption, it is very difficult to compute the firms' use of services like road transportation. The commodities they move and trucks they use can be determined, but not the portion of capital invested in roads which they utilise in the process. A related problem, is determination of the level of state investment to create a banking system capable of catering exclusively for the industry. Obviously, utilisation by the firms of state investment in such fields can only be crudely estimated.

Table 4

Share of STIC and Jumeira of Infrastructural Services Provided by the State for the Industry

	Entire Industry	Public Sector	Private Sector	STIC	Jumeira
Spindles	534,109	213,129	321,980	115,200	39,600
%	100	39.7	60.3	26.2	9.0
Looms	10,112	2,880	7,232	3,996	-
%	100	28.5	71.5	39.5	-
Cotton Consumption (000 bales)	261	104	157	90	9
%	100	39.8	60.2	34.5	3.4
Electricity Consumption (KW)	52,844	19,953	32,991	11,996	3,168
	100	37.6	72.4	22.7	6.0
Railway Wagons	100	40	60	35	-
%	100	40	60	35	-
Site Area (000 M^2)	350	200	750	130	50
%	100	21.1	78.9	13.4	5.2
Short-Term Finance (LS,m)	45	18	27	15	.4
% (Proportionate to productive capacity)	100	40	60	33	9

72. The following table shows the costs of infrastructural services utilised by STIC and Jumeira and the amounts charged to them by the state.

73. A first item is the fibre. The two factories were designed to consume mainly medium staple cotton of the Acala type. Acala yields were expected to be high enough, (5-6 kantars per feddan) and its lint yield sufficiently superior, at 38.9 per cent, to justify its displacement of the better ELS varieties whose yield per feddan stood at 4.9 for the V.S. variety and had only a 35.2 per cent lint yield, as is the case with the Barakat variety. However, Acala yields have been disappointing in the Sudan, averaging only 2.55 kantars during the period 1975/76, 1979/80, as against 2.98 kantars for ELS cottons. The production of 261,000 bales on feddans that yield only 2.55 kantars on average requires 439,000 feddans. At LS 474 per feddan, development costs would have been LS 204 million. To meet the requirements of the STIC and Jumeira mills of 90,000 and 9,000 bales, respectively, areas of 140,000 feddans and 15,000 had to develop at a cost of LS 70.1 million and LS 7.0 million, respectively.

Table 5

I.R.R. on Government Investments

Related to STIC and Jumeira

A. Government Investments

	STIC	JUMEIRA (£.S. million)	TOTAL
Acala Production	70.1	7.0	77.1
Electricity Generation	17.5	4.6	22.1
Rail Transportation	2.3	-	2.3
Site Preparation	0.2	0.1	0.3
Banking Services	15.0	0.4	15.4
Total	105.1	12.1	117.2

B. Government Revenue

Defense Tax	0.146		0.146
Railway Rates	0.606	0.240	0.846
Electricity Charges	4.664	1.232	5.896
Interest on Bank Credit	1.800	0.048	1.848
Total	7.216	1.520	8.736
Internal Rate of Return	6.87%	12.56%	7.45%

74. Electricity is the main source of energy for the textile industry. Unfortunately, its supply is very inadequate in the Sudan, and power-cuts are frequent. In order to cater for the industry's growing needs, Phase III of the Energy Plan is being implemented, at a cost £S 250 million to increase supply by 100 MW. The textile industry consumes 52,844 KWH, the shares of STIC and Jumeira being 11,996 KWH and 3,168 KWH, respectively.

75. Investment in Sudan Railways (SR) is said to be around £S 150 million. In 1980 SR moved 2,064,870 tons of merchandise; this included 16,822 tons of raw cotton and 15,000 tons of STIC cloth. This meant that STIC utilised 1.5 per cent of the sums invested in this service. Moving these quantities entailed the use of 35 railway wagons with an average net load of 20 tons and turnaround rate of 9.1 days. As for JTM, it relies on its own trucks to move its inputs and products. Its utilisation of the country's newly constructed highways of 1,411 kilometers costing £S 166 million is too small to be recorded.

76. The state allocates land to factories and incurs considerable expenses in surveying, levelling and allotting plots and in supplying them with road and sewage systems as well as water and electricity. The minimum costs of these services are estimated to average at £S 1.33 per square meter.

77. State-owned banks provide almost all firms in the industry with short-term finance. The central bank, Bank of Sudan, approves the ceilings set for large firms such as STIC, whose maximum borrowing was set in 1974 at £S 15 million. JTM is more self-sufficient and its borrowing is about £S 400,000. Both firms pay an interest rate of 12 per cent per annum on their loans.

78. There are no doubt other infrastructural services provided by the state that do not appear in the tables above. For instance, there is the training service provided by the Khartoum Textile Institute, which cost £2 2 million to establish. Many of the graduates of this Institute as well as employees trained by state-owned textile mills find work in private mills more stimulating and remunerative. However, the sums invested in this and other services are too small significantly to change the overall IRR estimate made above.

79. The IRR of 7.55 per cent realised on government investment in infrastructural services utilised by the two TNCs is not high, particularly since the returns received by the Government are related to capital not operational expenditures on said services. One important factor will in the furture raise the IRR: This is termination of the 5 to 10 year tax exemptions currently enjoyed by the two TNCs, particularly JTM.

80. Returns accruing to the Government can be assessed more accurately by introducing the concept of opportunity cost in the analysis. Obviously, this adds to the complexity of the treatment and may prove to be of limited usefulness in view of data deficiencies. To demonstrate how the analysis is modified by introduction of opportunity costs, the following considers only two of the inputs provided by the state, cotton and land.

81. The state has undertaken to expand the production of Acala cotton for mill consumption at the expense of the more remunerative ELS varieties. Thus, the value of the ELS sacrificed constitutes the opportunity cost that ought to be included in any proper costing of cotton processing in the country. The larger yields of ELS cottons 2.90 k/f vs. 2.55 k/f for Acala) and higher prices (£S 219.6 per bale vs. £ 181 for a bale of Acala) meant sacrificing 261,000 bales of ELS cotton in order to supply the mills with an equal amount of Acala. This in effect awarded the mills 277 thousand bales of Acala for the price of 261 thousand bales. Besides, had the mills been designed to consume ELS varieties, the area needed to produce the 261,000 bales they consume would have fallen from 430,000 feddans, which cost £S 204 million to develop, to only 368,000 feddands cost £S 174 million.

82. Charging the TNCs £ S 1.33 per square meter for sites may bring the state enough revenue to cover development costs, but the same land is known to sell in the open market for£ S 10 per square meter. Thus, the two mills paid only £S 306 thousand for services worth £S 2.3 million at open market prices.

83. This indicates that the IRR estimates made above will have to be adjusted downwards considerably if the services provided by the state are paid for at rates reflecting their opportunity cost.

CHAPTER V

BARGAINING POSITIONS

84. The previous section of this study has shown that the retained portion of the value of products made from its raw cotton grew as the Sudan progressed from mere production of raw cotton to its export and processing into yarn and fabrics. The internal rate of return on Government investment in infrastructural services to the textile TNCs is not high. The study now examines the factors affecting the bargaining positions of the Government on the one hand and the TNCs on the other, which influence the distribution of gains between the two.

A. General

85. First the situation in the world cotton industry is uniquely favourable to the host developing countries. Compared with most industries that process African primary products, the cotton textile industry requires little capital and simple technology, hence the marked importance of labour and raw material in its cost structure. The strong influence exerted by these two elements explains the growing tendency for the world textile industry to move to the Third World where labour is cheap and the raw material abundant. The facts that developing countries are themselves sizeable consumers of textiles and offer the fastest growing markets are added advantages. The inclination of many prominent TNCs to ally themselves with the developing nations so as to benefit from these comparative advantages is also strengthening the bargaining position of these countries. This alliance, however, does not remove the basic conflict of interest between TNCs and host developing countries over the distribution of gains from the industries established within these countries, nor does it reduce the importance of their relative bargaining positions in determining how these gains are distributed.

86. It is unfortunate that other world developments have negated many of the advantages that accrued to the developing countries as a result of the shift of the world textile industry from advanced to developing regions. One example is the reversal, during the 1970s, of the strong antipathy demonstrated by many of the newly independent countries towards foreign investment during the 1960s, and of the extensive nationalisation which this latter decade witnessed. During the 1970s more and more developing countries including the Sudan adopted open-door policies, liberalised their economies denationalised many key sectors of their economies and instituted measures intended to attract foreign inestment.

87. Many developing countries have been forced to adopt an ambivalent attitude towards private foreign capital because of a decline in official aid in real terms from the rich countries. In addition, many poor countries which incurred heavy foreign debts find themselves forced to adopt very liberal policies in order to get the support of such bodies as the International Monetary Fund and the world banking system. Countries that value imported technology are forced to seek it from the world TNCs which hold the vast bulk of patents for newly developed products and techniques. The rich countries have pressed for and obtained ratification by the poor countries of agreements containing guarantees and assurances for foreign investments by the former in the latter. On the other hand, the rich countries which secured these benefits for their TNCs have strongly resisted imposition of any regulations on TNC activities and have only consented to a morally-binding 'code of conduct'.

88. The international business climate is particularly unfavourable to the textile manufacturing countries of the Third World, which use their own cotton for processing. None of them are dominant producers of the fibre, nor are there any special qualities in their cotton to attract foreign investors. In fact, cotton producing countries usually compete strongly against each other. The only body that brings them together is the International Cotton Advisory Committee (ICAC), which includes both consuming and producing countries. The Committee is purely consultative in nature, and its effort to promote the consumption of cotton at the expense of other fibres is perhaps the strongest joint influence it is willing to exert on the market. UNCTAD is including cotton among the products listed in its International Commodity Agreements, but so far, little has been done to get these agreements approved. Besides, all the ICAs proposed by UNCTAD combed both producers and consumers, and the one governing cotton is no exception. Thus, cotton producers do not have at the moment any form of association to protect their interests against buyers and processors of their product.

89. Exporters of textiles from the Third World are in no better position than the cotton exporters. Most are participants in the Multi-Fibre Arrangement, which has many developed countries as signatories. The latter include both exporting and importing countries which generally show greater solidarity amongst themselves, than with Third World countries. Closer co-operation among their textile TNCs has no doubt strengthened their bargaining position vis-a-vis their Third World rivals. They also exploit the right to conclude bilateral agreements (given by the 'reasonable departures' waiver) so as to discriminate not only against the developing countries, but also among them. This has naturally undermined efforts by the latter to close their ranks in opposition to the former. Most adversely affected by this arrangement are countries with new textile industries like the Sudan.

B. The Sudan

90. In dealing with the textile TNCs, the Sudan suffers from most of these handicaps as well as others of its own making. For instance, the advantages of cheap labour and a protected textile market which attract TNCs to the country are eroded by unchecked labour militancy and unwarranted suspensions of protectionist measures. Without these two advantages, the bargaining position of the country is quite weak, as there is little else to draw TNC investments in the country.

91. The Sudan has yet to develop a system for negotiating with TNCs in a manner that brings maximum benefits to the country. There is no central body responsible for dealing with TNCs, and most of the negotiating that takes place is between the TNC and some associate Sudanese firm. The agreement reached between these two parties is then submitted for approval by the relevant state organ, the Registrar of Companies and Business Names or the Ministry of Industry. These bodies apply laws that impose very limited obligations on TNCs regarding transfer of technology, training of Sudanese staff, Sudanisation schemes, local participation in equity, protection of environment, etc. This is particularly true of the Investment Act of 1990, which does not even contain the requirement that the TNC should seek to train Sudanese staff 'within reasonable time' for holding senior posts- a salient feature of the 1956 Act.

92. In 1979, the Government set up a special Bureau for Foreign Investment, intended to facilitate the work of TNCs, not supervise or control their activities.

Such a body is very much needed in view of the vast growth of foreign business in the country in recent years. There is also an obvious need for formal training persons in how to deal with TNCs, yet little is being done in this area. The sole effort made in this respect was iniated by the United Nations Centre for Trans-National Corporations, which organised a few training workshops for officials who deal with these firms. Furthermore, constant emigration of top Government officials to the rich oil states is depleting the Sudan's small reservior of experienced negotiators.

93. For their part, TNCs have organisations which speak for them and seek to promote their interests. They often team up with local associates in presenting their case to the Government. The Sudan-US Business Council is a good example. The American side includes representatives of the major US TNCs operating in the country such as Chevron, Union Carbide, Arkel and Tenneco. The Sudanese-US Business Council played a major role in the drafting of the 1990 Investment Act. The Council enjoys considerable prestige in the country because its American members claim to exert much influence in Washington in favour of the Sudan. This, no doubt, enhance their bargaining power when negotiating with the Sudan Government.

94. It thus seems that the Sudan is not in a strong bargaining position when dealing with the textile TNCs operating within its borders. Inadequate capital generation, continuous balance of payment deficits, mounting foreign debts and a severe skill-drain place the country in a weak position before foreign firms that pose as suppliers of much needed funds and know-how. In this respect, the Sudan does not differ much from the majority of the developing countries which host TNCs. The fact that TNCs and their home countries co-operate more closely than the Third World countries in which the TNCs operate places the onus for action on individual host countries - at least, until some concerted action is worked out. In this respect, the Sudan's efforts leave much to be desired. Creating a specialised office for dealing with TNCs is a major step in the right direction. The office must combine the diffused powers now given to the state bodies responsible for the implementation of the Investment Act, the labour inspection authority, the industrial health unit, the price-control adminstration, the tax department, the auditor general and all other organis that deal with TNCs. Training courses must be devised for the staff of this office in how to negotiate with and supervise the activities of TNCs.

95. Finally, a standard contract must be prepared for mandatory signature by TNCs operating in the country. The contract must clearly set out the TNC's obligations regarding transfer of technology, staff training, Sudanisation of senior posts, wage-fixing, pricing of inputs and products, etc. This will require amending the Investment Act of 1990 so as to limit concessions set out in the Act only to firms that honour the contract. For its part, the country must create a healthy and orderly climate fr investment by curbing trade union excesses and avoiding sudden and frequent changes in policies and procedures.

96. Introduction of such measures will no doubt strengthen the hand of the Government in dealing with TNCs and enable it to extract maximum benefits from the expanding activities of these firms. Under present cirucmstances, these benefits can be quite tangible.

CHAPTER VI

CONCLUSION

97. Over half the period covered by the 15-Year Tentative Plan for Sudan Cotton Textile Industries has elapsed without the country achieving the target of self-sufficiency expected of its first phase. In fact, despite some progress towards this goal in the mid-1970s, the gap between production and consumption of fabrics began to widen in the last years of the past decade. The share of imported fabrics rose to 55 per cent of market requirements. However, in recent years the Sudan has began to export yarn as envisaged in Phase II of the Plan, although state weaving plants are working well below capacity due to delays in completion of the spinning mills that feed them. As matters now stand, prospects for the Sudan to become a significant yarn exporter are considerably brighter than its chances of attaining self-sufficiency in fabrics. Foreign TNCs have played a leading role in creating this situation.

98. Needless to say, the interests of these TNCs are not in complete harmony: there is a sharp clash between those TNCs which would prefer to see the Sudan and similar countries export raw cotton and even cotton yarn and remain importers of fabrics, and those TNCs that are either selling textile machinery or establishing their own weaving sheds inside the country. The former advocate protectionism in the developed countries, while the latter urge the Sudan to follow a similar line. Naturally, the country is inclined to sympathise more with the TNCs that support its drive for self-sufficiency in fabrics, but it can also benefit from the former group so long as it remains a fibre and yarn exporter and does not venture into the production exportation of items covered by the MFA.

99. The record of foreign TNCs engaged in the production of fabrics for domestic consumption in the Sudan is not untarnished. Reference has already been made to the heavy toll some of them take from the government in the form of subsidies and tax exemptions and from its banks in mounting debt arrears. In addition, many of the benefits which TNCs allegedly bring to poor countries are either absent or unnoticeable in the Sudan, while their familiar defects are quite evident.

100. It is often claimed that TNCs do not only supply host countries with much needed capital but also help to introduce advanced technology, create jobs, pay good wages, train local personnel, raise labour productivity and generally invigorate the whole economy. This has not really taken place in the Sudan, except within limits.

101. It is significant for instance, that in most cases suppliers' credit exceeded by far the capital subscribed by the TNC involved in a textile project; as a result, much of the foreign exchange saved through import substitution is spent on debt servicing. In the case of the Sudanese-American Factory, the ratio of suppliers' credit to paid-up capital was almost 6 to 1. The foreign exchange leakages caused by the project in the form of lost revenue from cotton exports and payments for imported chemicals and spare parts as well as profit remittances are taken into consideration, the plant may in fact drain instead of contributing to the country's meagre reserves of hard currency.

102. The investments made by the textile TNCs have created vast employment opportunities: STIC alone employs 8,500 persons; KSIC has 3,000 employees. Furthermore, their pay is quite good by Sudanese standards. However, Sudanese textile workers are still among the lowest paid in the world, as comparisons of hourly pay have revealed. In fact, a leading textile TNC, STIC, admits that its high labour turnover rates are caused by constant emigration of workers to oil rich countries where salaries are much higher. It also complains of absenteeism by workers who earn more by washing cars than by working for them. Indeed, payment of low wages is essential to a TNC which wants to remain cost-competitive against another that relies on the superior quality of its products.

103. Owners of textile mills complain of the low productivity of Sudanese labour. They view this weakness as the real justification for paying low wages. Yet there are no organised programmes to train workers in the textile industry: most of the training is done on the job. Investors clearly prefer to ignore rather than solve the problem of low labour productivity. Some rely heavily on Japanese, British, Korean, Pakistani or Egyptian expertise, a few of whom have now been replaced by Sudanese. Other investors are showing increasing preference for automatic machinery, with the result that labour-per-machine rates have been falling. This is particularly noticeable at the weaving stage, where the industry has become increasingly capital-intensive. TNCs which operate mills in the country justify the employment of foreign experts on a more or less permanent basis by pointing out that their turnover rates are lower than those of the Sudanese. They also see an escape from growing trade union pressures in increased automation. Whatever the justifications, the fact remains that the country's nationals are being deprived of employment and training benefits which are among the most important services which TNCs can render to host countries.

104. There is little evidence that the textile industry is having a favourable impact on the Sudanese economy as a whole. As an agro-industry, textile manufacturing is supposed to have strong backward linkages stretching deep into agriculture. This, however, is not the case in the Sudan: here the textile mills are largely designed to consume the coarser cottons, which are generally in short supply in the country. Quite often they have to be fed with finer growths so as to keep them in production, although this is a highly wasteful use of fine cotton. In fact, the country is being forced to shift from the highly-prized ELS cottons to shorter and coarser growths so as to suit the desires of the textile manufacturers. Since, in addition some of the leading textile mills use imported synthetic yarn in producing synthetic or blended fabrics on a large scale, the Sudanese textile industry's backward linkages are deficient. The same can be said of forward and lateral linkages: STIC is the only mill that has developed into a cloth-maker, and the country is still without a starch factory to supply the bleaching section of the industry. Heavy reliance of the industry on the inadequate state infrastructure has been a major reason for frequent breakdowns in services. Only very few mills have their own generating power: GEMATEX and the Red Sea Spinning Factory are among them. Jumeira Textile Mills bought 40-foot USA-made trailer-tractors to transport inputs and finished products, and the Bageir mill uses its own twenty buses to transport its 1,600 employees. Most of the other firms rely on public transport.

105. The yarn-exporting section of the industry does not suffer from all the weaknesses of the fabric-manufacturing section. Its ability to compete on a cost basis in world markets contrasts sharply with the failure of the heavily subsidised fabric firms to hold their ground against highly-taxed imports. Yarn exporters only

use local fibre as raw material, and most of them are prepared to process ELS cotton into fine counts. Furthermore, the mills which provide their own electricity supply and transport services are the ones engaged in yarn production for exportation.

106. When the Government sought in an effort to stimulate growth to establish industry in the rural areas, it chose to set up six spinning mills in different villages as the best vehicles for promoting growth. However, taking yarn and fabric manufacturing textile TNCs as a whole there seems to be little evidence to support the claims that TNCs are the great new benefactor of the Third World. It is also hard, however, to say that the Third World would have been better off without them.

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Appendix II

STATISTICAL

T A B L E S

Table I

Basic Cotton Statistics - World,

Africa and Sudan

(000 M. Tons)

		1969/70-1971/72 Average			1977/8-1979/80 Average	
Production	12,035	1,327	245	13,722	1,123	150
%	100	11	11	100	8	13
Consumption	11,994	429	14	13,741	577	13
%	100	3	3	100	4	2
Exports	3,936	945	226	4,435	634	167
%	100	24	24	100	14	26
Stocks	4,668	526	177	4,941	539	136
%	100	11	34	100	11	25

Source: I.C.A.C.

N.B. Percentages refer to Africa's share of world and Sudan's of African aggregates.

Table II

World Mill Consumption

of Fibres (000 M.T.)

Year	Cotton	%	Wool	%	Rayon	%	Synthetics	%	TOTAL
1970	12,053	56	1,500	7	3,436	16	4,700	22	21,689
1973	13,281	51	1,443	6	3,660	14	7,640	29	26,024
1976	13,413	50	1,462	6	3,219	12	8,601	32	26,717
1979	13,994	47	1,490	5	3,371	11	10,614	36	29,470

Source: I.C.A.C.

Table III

World Production of Textiles and Clothing by Areas

(Annual % Change in Volume)

	1963-1973	1973-1979	1977	1978	1979
		Textiles			
World	5	2	¼	2	1
Industrial countries	4¼	0	-1 ¼	¼	1
Developing countries	4¾	3	0	3¼	4¼
Eastern trading area	6	4¼	1	4	1¼
		Clothing			
World	4	2	2¼	1¼	2
Industrial countries	2	1	1¼	-¼	1
Developing countries	5½	3¼	-1	3	3¼
Eastern trading area	77	5		4¼	3¼

Source: G.A.T.T.

Table IV

Industrial Countries-

Imports of Textiles and Clothing

(Annual % Change in Value)

	Textiles			Clothing		
	1973/6	1977	1979	1973/6	1977	1979
Total	8	9¼	25	19	13¼	24
Industrial countries	7¼	10	23¼	12¼	16¼	23
Developing countries	9	8	29	27¼	10	21

Source: G.A.T.T.

Table V

Production of Cotton Yarn by Area

(000 Metric Tons)

	1972		1976		1979	
World	10,500	100%	11,050	100%	11,925	100%
United States	1,592	15.1	1,270	11.4	1,116	9.5
EEC @	853	8.1	845	7.7	670	5.7
Japan	555	5.3	490	4.5	500	4.3
Developing * countries	1,926	18.9	2,315	21.0	2,516	21.3

Source: I.C.A.O.

@ Belgium, France, W. Germany, Italy, Netherlands, U.K.

* Taiwan, Hong Kong, India, Korea, Pakistan, Turkey, Egypt.

Table VI

Labour Costs per Hours (1976/77)

(US $)

Belgium	6.30	W. Germany	7.40	Holland	7.30
Switzerland	1.20	Denmark	6.70	Norway	6.30
Italy	5.10	Canada	4.90	USA	4.40
France	3.90	Britain	3.20	Ireland	2.90
Greece	2.60	Turkey	1.50	Portugal	1.40
Tunisia	0.90	Brazil	0.60	S. Korea	0.42
Sudan	0.40	Egypt	0.36	Pakistan	0.22

Source: Werner Consultants.

Table VII

Largest Textile Firms

1979 Banking	Name	Nationality	Sales (M. US$)	Assets	Employees (000)
1.	Cortaulds	British	3,223	2,5[illegible]	12[illegible]
2.	Asahi Chemicals	Japanese	2,762	2,[illegible]	21
3.	Burlington Ind.	American	2,676	1,954	67
4.	Haci Omer Sabanci	Turkish	2,629	3,[illegible]	27
5.	Korebo	Japanese	2,269	2,131	1[illegible]
6.	Levi Straus	American	2,103	1,291	45
7.	Interco	American	1,851	1,[illegible]03	413
8.	J.P. Stevens	American	1,832	1,[illegible]41	21
9.	Toyobo	Japanese	1,798	1,504	1[illegible]
10.	Hyosung	S. Korean	1,558	1,515	2[illegible]
11.	Coats Paton	British	1,451	1,297	6[illegible]
12.	Union Camp	American	1,380	1,440	16
13.	Dolfus-Mieg	French	1,079	[illegible]06	22
14.	Blue Bell	American	1,029	679	30
15.	W. Point-P	American	1,012	592	23
16.	Unitka	Japanese	994	1,204	[illegible]
17.	Mitsibushi Rayon	Japanese	991	99[illegible]	[illegible]
18.	Sunkyang	S. Korean	852	740	1[illegible]
19.	Sperry & Hutchn.	American	800	814	10
20.	Tootal	British	773	559	20
21.	Du Pont Chenicals	Canadian	751	491	6

Source: Fortune Magazine

Table VIII

Top Producers of Artificial Fibers

	1980 Sales (B. US.$)	% of Total Sales
Du Pont	4.5	33
Hoechst	2.1	13
Bayer	1.9	12
Montedison	1.1	12
Monsanto	1.1	16
ICI	9.7	6

Source: Partly Chemicals

Table XI

Sudan Cotton Statistics

(000 Metric Tons)

	1973	1974	1975	1976	1977	1978	1979	1980
Production		256	220	108	159	193	139	114
Consumption	13	15	14	15	14	11	11	15
Exports	237	157	118	215	146	149	177	175
Stocks	132	195	282	158	157	195	145	68
Yarn Production	9.5	9.7	9.9	7.3	6.0	4.7	5.5	3.6
Yarn Imports	.3	.4	.4	1.0	1.2	1.2	1.2	1.2
Cotton Piece Goods:								
Production	12.0	12.0	13.0	11.0	14.0	14.0	15.0	17.0
Imports	13.0	14.0	13.0	16.0	15.0	17.0	17.0	20.0

Source: I.C.A.C., Bank of Sudan, S.T.I.C.

N.B. Stocks as on August 1 of given years.

Table X

Shares of Biggest Exporters

of Sudan's Cotton (1959-1961)

	1959		1960		1961	
Total Exports (000 bales)	947	100%	550	100%	560	100%
Biggest Firm	154	16	86	15	125	22
Biggest Three	381	40	217	39	252	46
Biggest Five	550	58	315	57	345	62
Biggest Ten	809	85	437	86	465	83

Source: Sudan Cotton Review.